

1/10

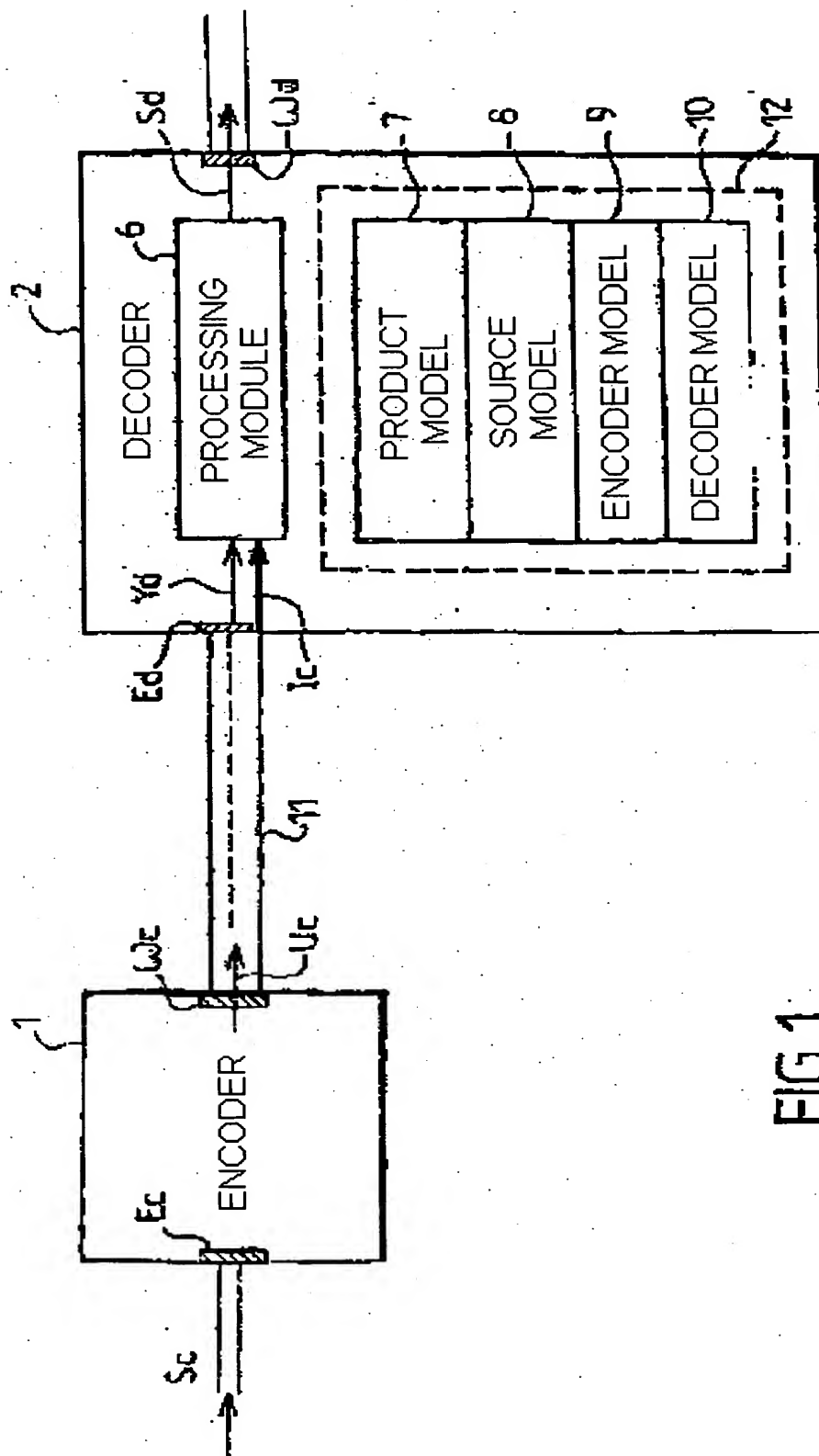


FIG.1

10/521962

2110

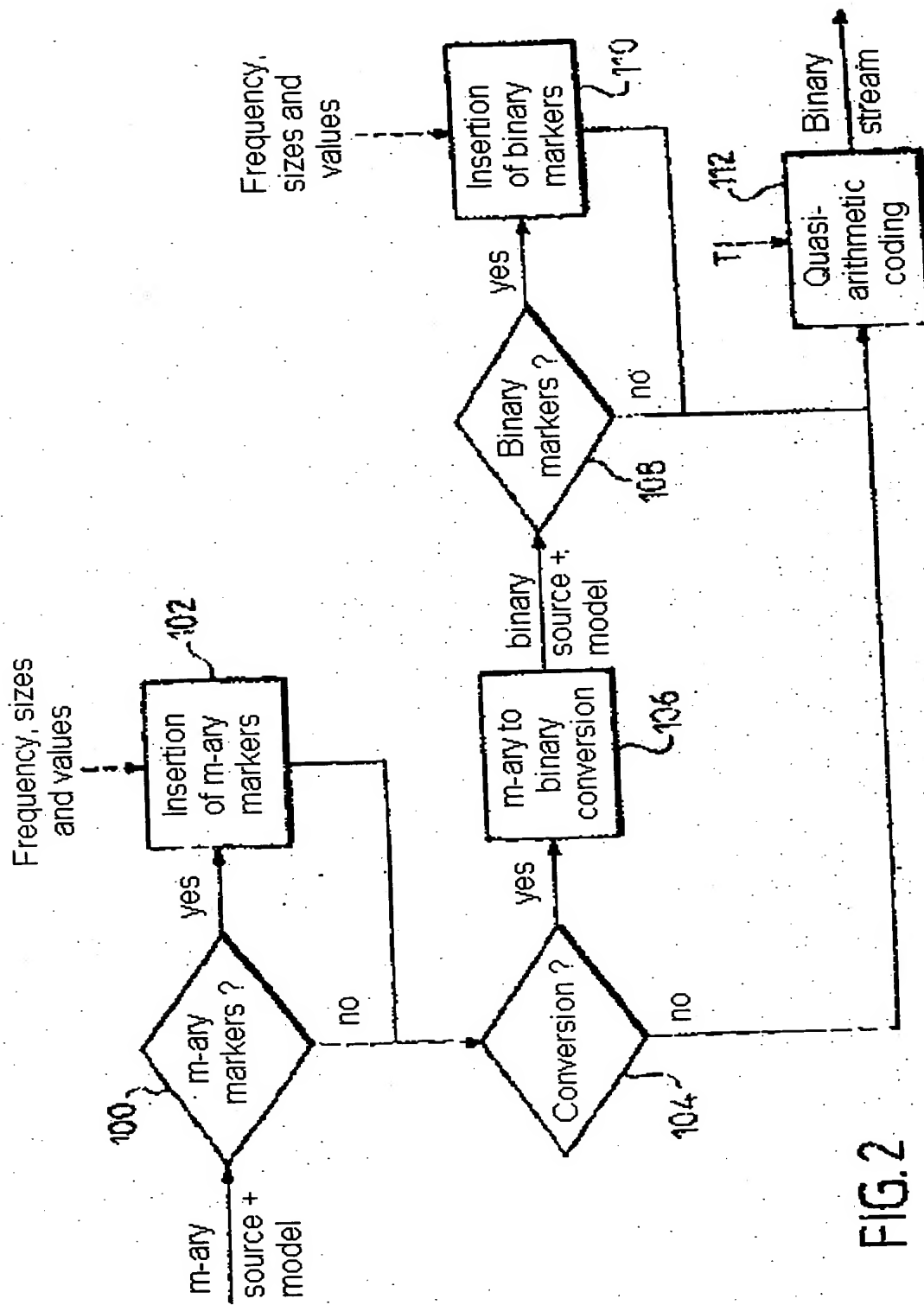
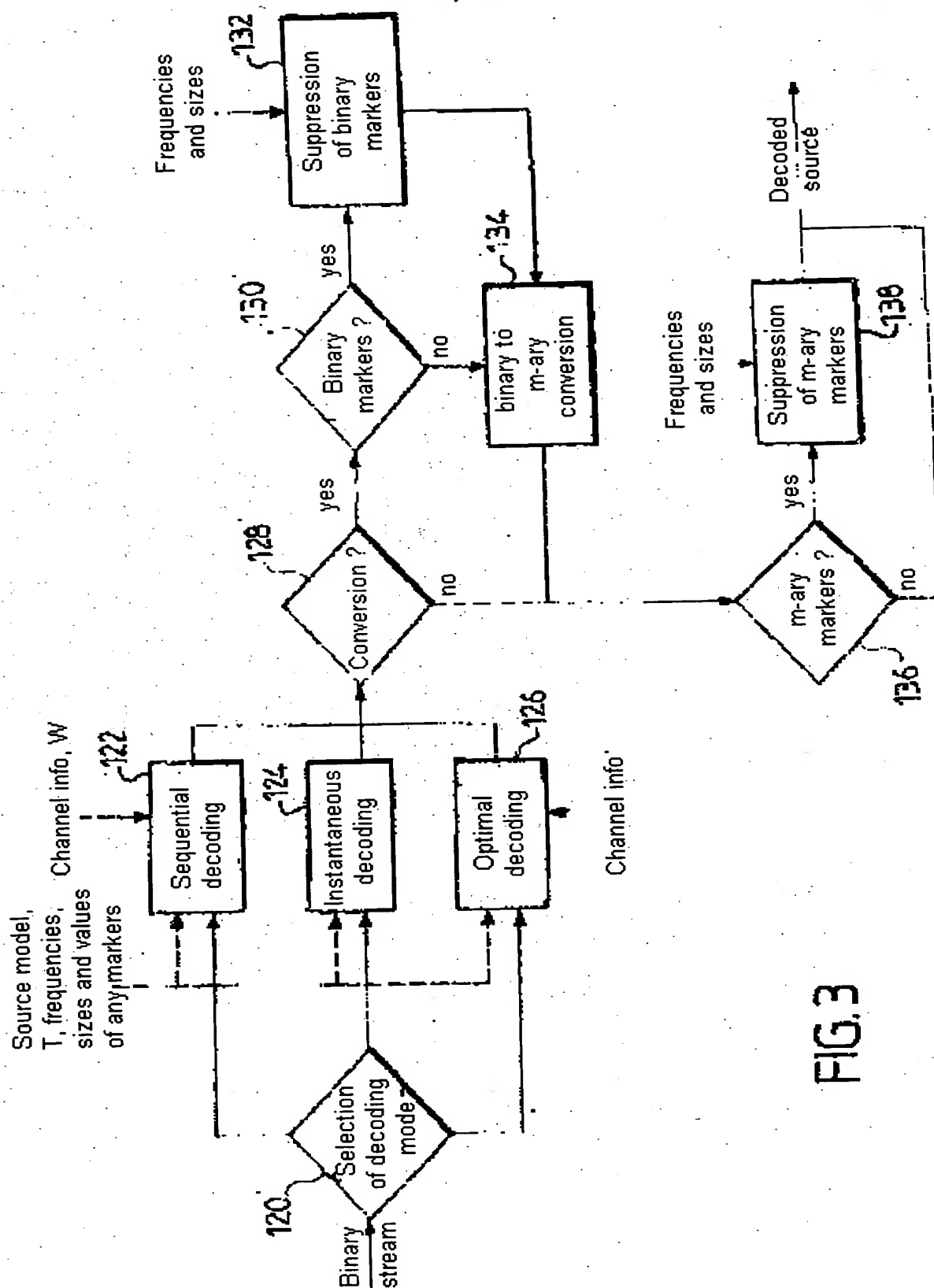


FIG. 2

3/10

10/521962



32

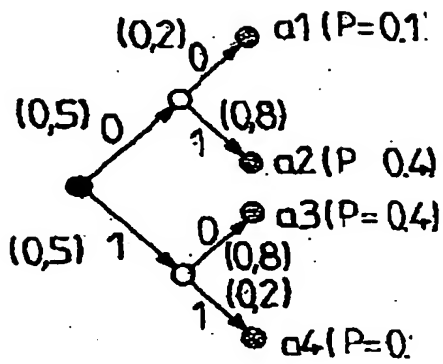


FIG. 4a

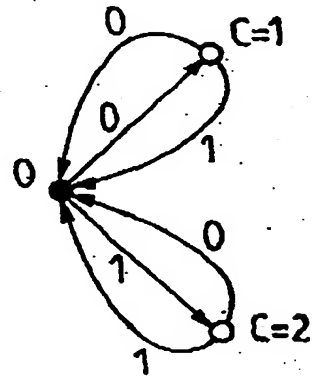


FIG. 4b

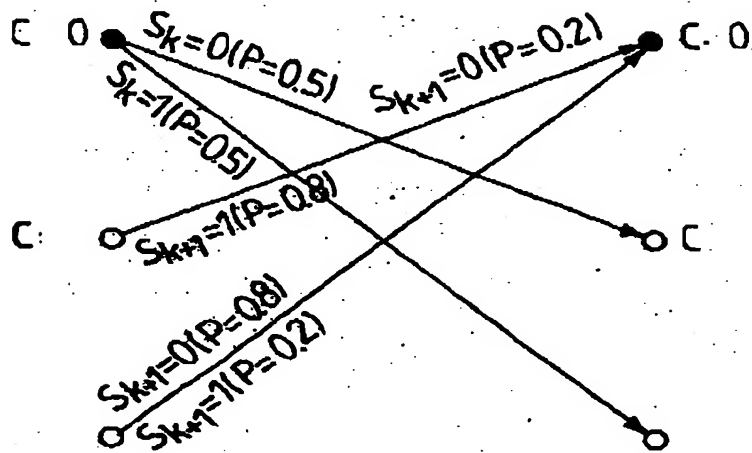


FIG. 4c

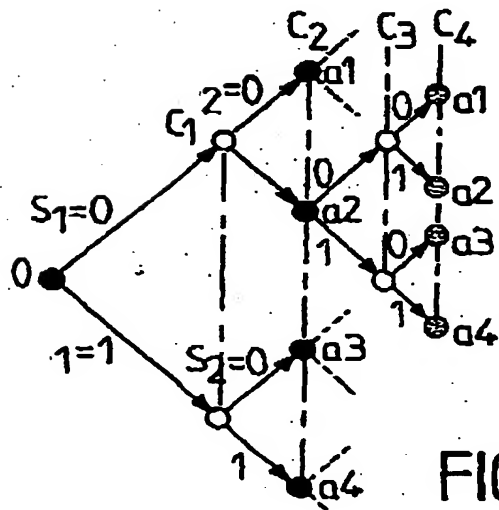


FIG. 5a

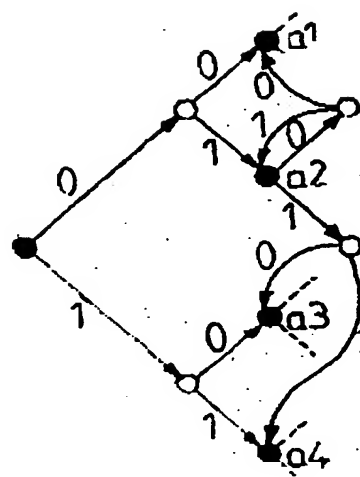


FIG. 5b

C1      C2      C3

State $E_k$	$[lowS_k, upS_k]$	P(0), corresponding subdivision interval	normal states model			simplified states model		
			$S_k = 0$	$S_k = 1$	$S_k = MPS$	$S_k = LPS$	bits emitted	next state
0	[0,4]	$0.63 \leq P(0)$	-	11	-	1	11	0
		$0.37 \leq P(0) < 0.63$	0	1	0	0	1	0
		$P(0) < 0.37$	00	-	2			
1	[0,3]	$0.5 \leq P(0)$	0	10	0	0	10	0
		$P(0) < 0.5$	00	0	0			
2	[1,4]	$0.5 \leq P(0)$	1	11				
		$P(0) < 0.5$	01	0	1	0		

Table 1

K1      K2      K3

State $E_n$	State variables	P(MPS) (corresponding subdivision of [low $S_n$ , up $S_n$ ])	$U_n = 0$	$U_n = 1$
0	$[lowU_n, upU_n] : [0,4]$	$0.63 \leq P(MPS)$	MPS, MPS	-
	$[lowS_n, upS_n] : [0,4]$	$0.37 < P(MPS) < 0.63$	MPS	LPS
1	$[lowU_n, upU_n] : [2,4]$	$0.63 \leq P(MPS)$	MPS, LPS	LPS

Table 2

6/10

10/521962

State $X_k$	State variables	MPS	LPS
0 Initial state	$\{0,4\}$ $C=0$	bits emitted: 0 next state: 1	bits emitted: 1 next state: 2
1	$\{0,4\}$ $C=1$	bits emitted: - next state: 3	bits emitted: 11 next state: 0
2	$\{0,4\}$ $C=2$	bits emitted: - next state: 3	bits emitted: 11 next state: 0
3	$\{0,3\}$ $C=0$	bits emitted: 0 next state: 1	bits emitted: 0 next state: 2

FIG. 6A

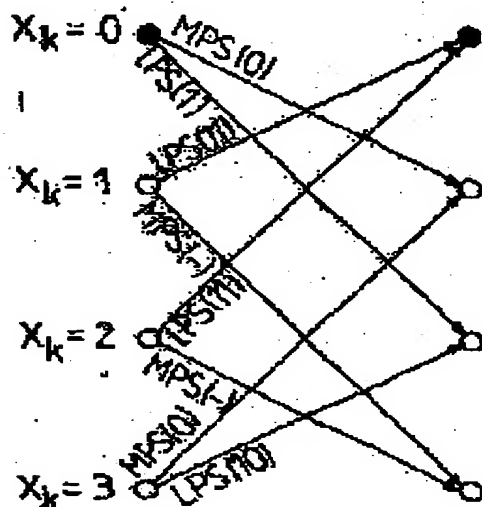


FIG. 6B

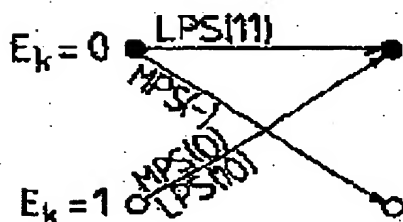


FIG. 7A

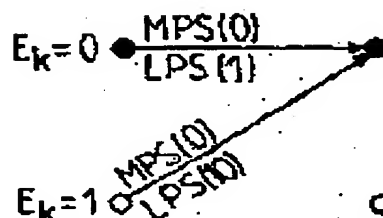


FIG. 7B

7/10

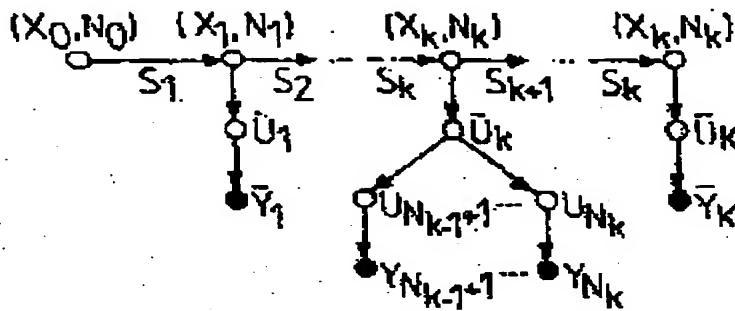


FIG. 8

State $X_k$	State variables	$U_n = 0$	$U_n = 1$
0 Initial state	$\begin{bmatrix} 04 \\ 04 \\ C=0 \end{bmatrix}$	symbol emitted : MPS next state : 1	symbol emitted: LPS next state : 2
1	$\begin{bmatrix} 04 \\ 04 \\ C=1 \end{bmatrix}$	symb emitted: MPS, MPS next state : 1	symbol emitted: - next state : 3
2	$\begin{bmatrix} 04 \\ 04 \\ C=2 \end{bmatrix}$	symb emitted: MPS, MPS next state : 1	symbol emitted: - next state : 4
3	$\begin{bmatrix} 24 \\ 04 \\ C=1 \end{bmatrix}$	symb emitted: MPS, LPS next state : 2	symbol emitted: LPS next state : 0
4	$\begin{bmatrix} 24 \\ 04 \\ C=2 \end{bmatrix}$	symb emitted: MPS, LPS next state : 2	symbol emitted: LPS next state : 0

FIG. 9a

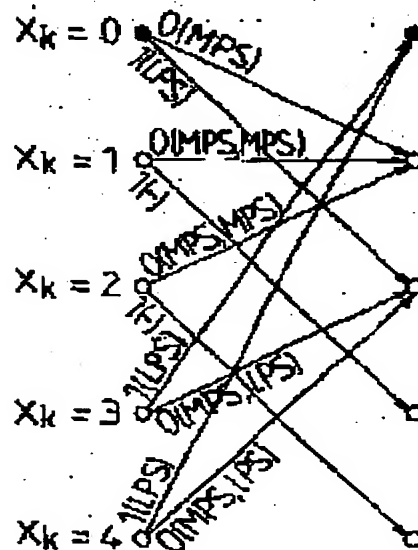


FIG. 9b

8/10

10/521962

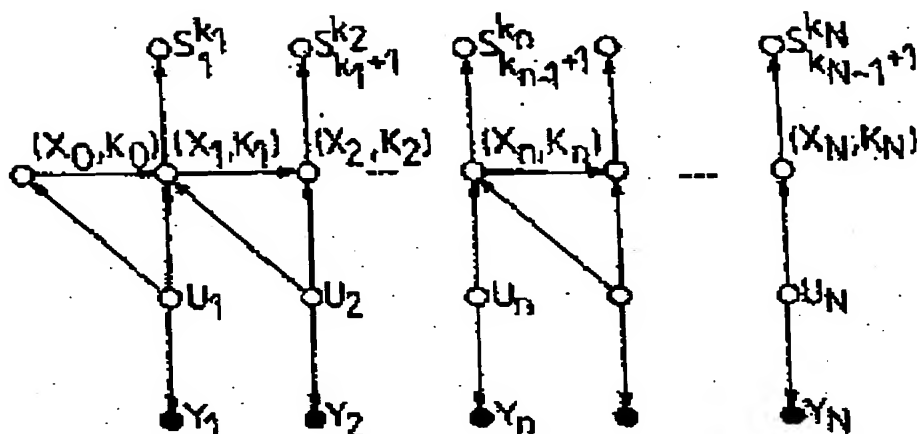


FIG. 10

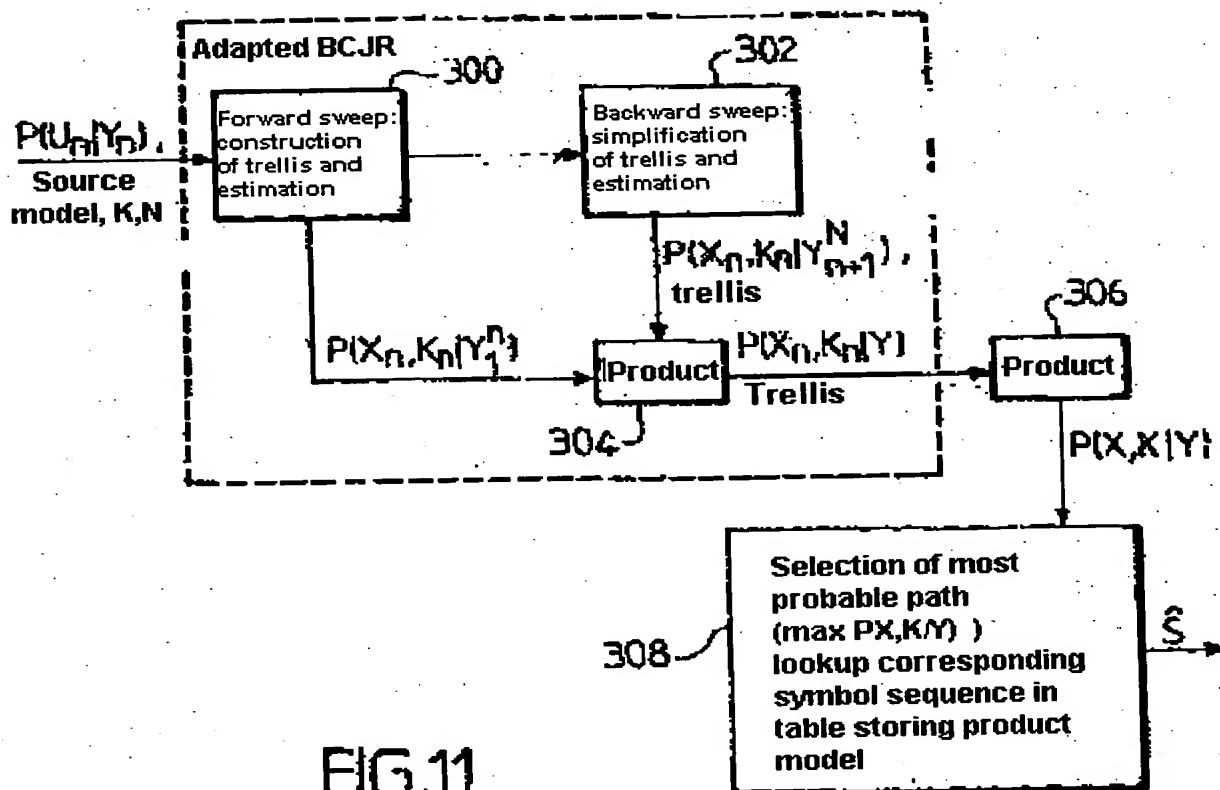


FIG. 11



10/521962

9/10

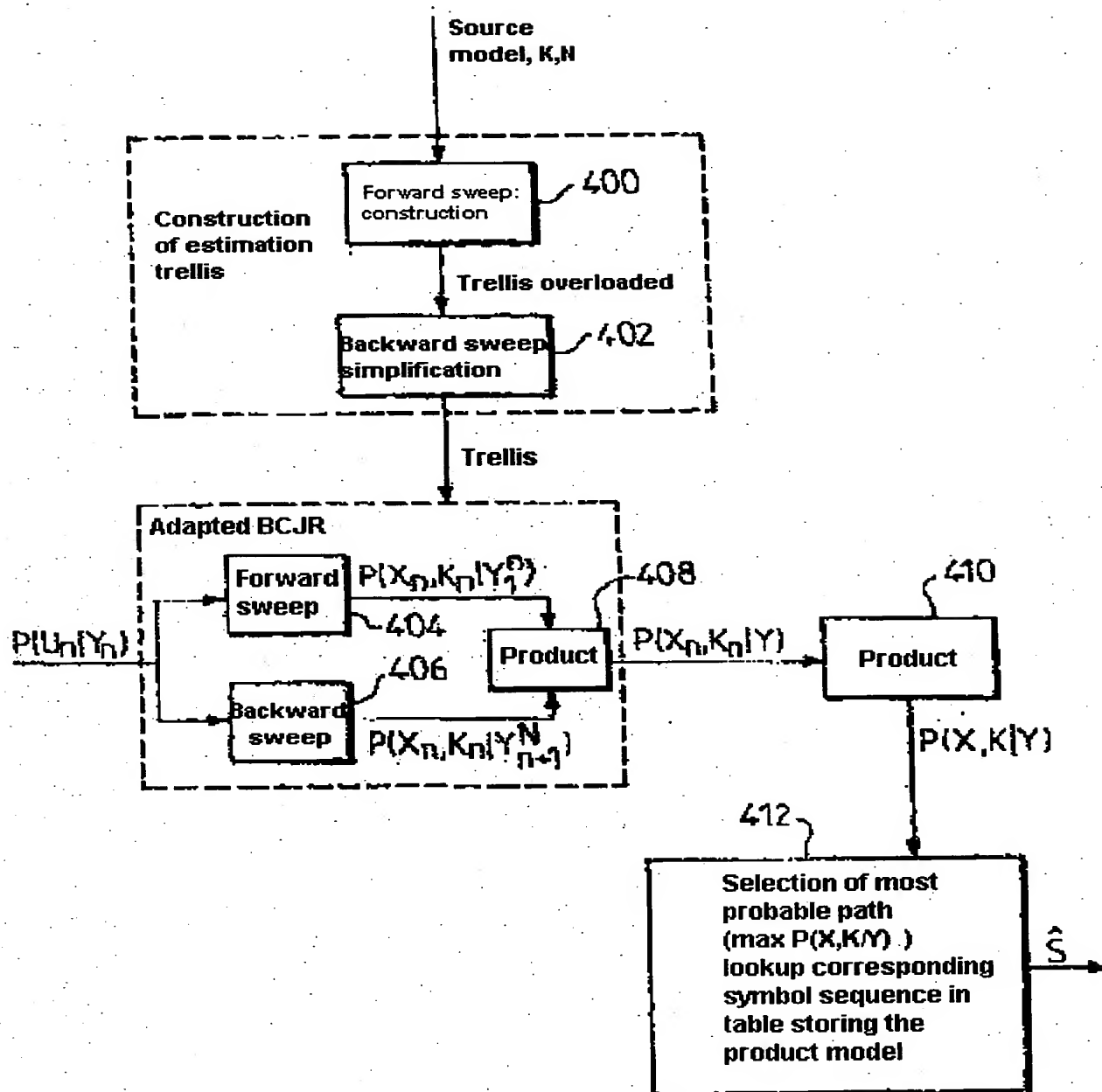


FIG.12

10/521962

10/10

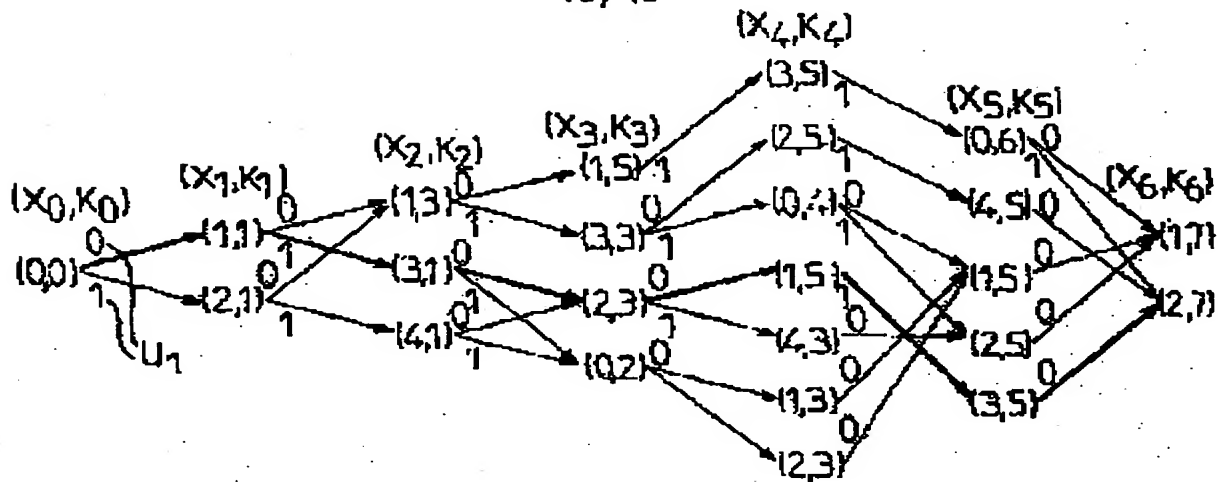


FIG. 13

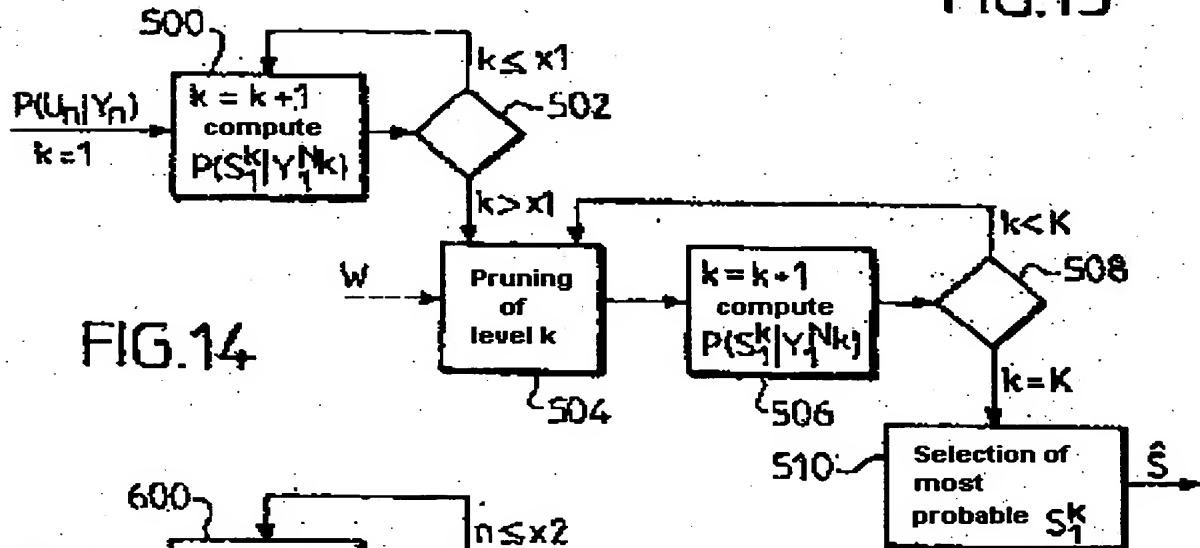


FIG. 14

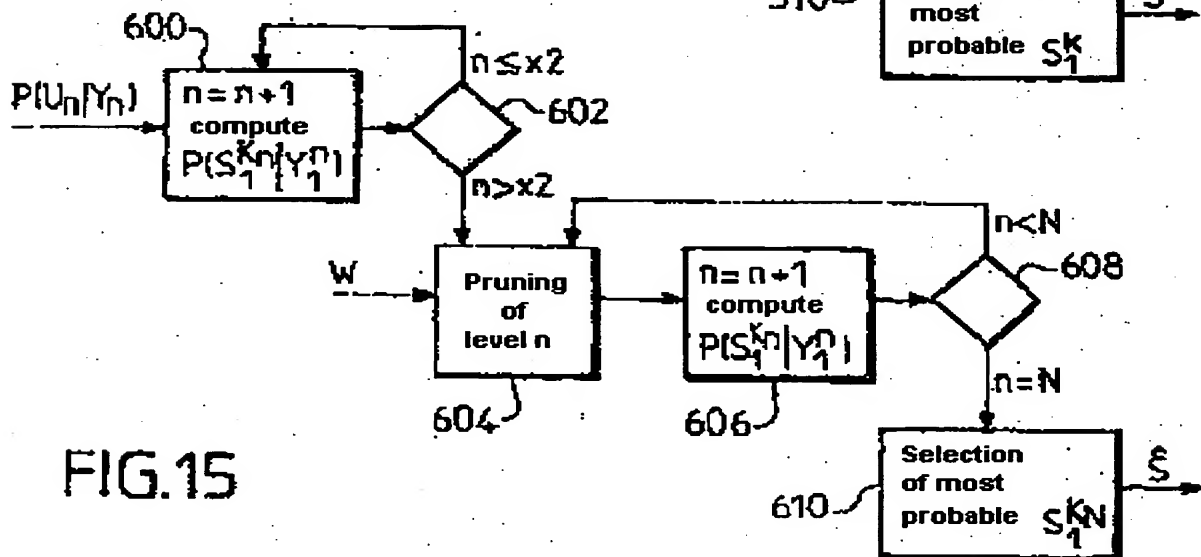


FIG. 15

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ **BLACK BORDERS**

☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☒ **FADED TEXT OR DRAWING**

☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☐ **SKEWED/SLANTED IMAGES**

☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**